

DESERT LOCUST BULLETIN

FAO Emergency Centre for Locust Operations



No. 253
(9 Nov 1999)



General Situation during October 1999 Forecast until mid-December 1999

The Desert Locust situation continued to remain calm during October. Small scale breeding occurred in Mauritania and in northern Mali, but the latter remained unconfirmed. Isolated adults were reported in northern Sudan and northern Somalia. Locust numbers declined along the Indo-Pakistan border. During the forecast period, vegetation will continue to dry out in summer breeding areas, a few small groups may form and adults will start to shift from summer to winter/spring breeding areas of North-West Africa and along the Red Sea coasts. This movement is expected to be on a relatively small scale this year.

Western Region. As a result of a small scale breeding that occurred in September and in early October, locust numbers increased throughout the month in central-southern Mauritania. A number of hopper patches and groups were detected which required limited treatment. By the end of the month, the first groups of fledglings were reported. Once vegetation starts to dry out, adults may form groups and start to move further north. There were unconfirmed reports of breeding and swarms in northern Mali. Breeding should continue for a few weeks and a small scale movement of adults towards

the north-west could occur by the end of the forecast period. Isolated adults were present in southern and south-eastern Morocco. There were unconfirmed reports of scattered adults in south-western and southern Algeria. Late reports indicate that low numbers of adults were present in Aïr and Tamesna, Niger during September where breeding may have occurred and scattered locusts could now be present.

Central Region. A few solitarious adults were present in northern Sudan where conditions are drying up. Good rains fell near Port Sudan and along the southern Red Sea coastal plains of Saudi Arabia and Yemen. Locust numbers are expected to increase in these areas as they appear and start to breed on a small scale. Some solitarious adults were present in south-western Egypt. No locusts were reported from eastern Ethiopia and isolated mature adults were present in north-western Somalia

Eastern Region. Locust numbers decreased in the summer breeding areas along the border of India and Pakistan due to drying conditions. The movement towards the spring breeding areas of Baluchistan is expected to be small. No locusts were reported in Iran.

The FAO Desert Bulletin is issued monthly, supplemented by Updates during periods of increased Desert Locust activity, and is distributed by fax, e-mail, FAO pouch and airmail by the Locusts and Other Migratory Pests Group, AGP Division, FAO, 00100 Rome, Italy. It is also available on the Internet.

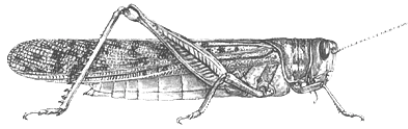
Telephone: +39 06 570.52420 (7 days/week, 24 hr)

Facsimile: +39 06 570.55271

E-mail: ecl@fao.org

Telex: 610181 FAO 1

Internet: <http://www.fao.org/news/global/locusts/locuhome.htm>



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Weather & Ecological Conditions in October 1999

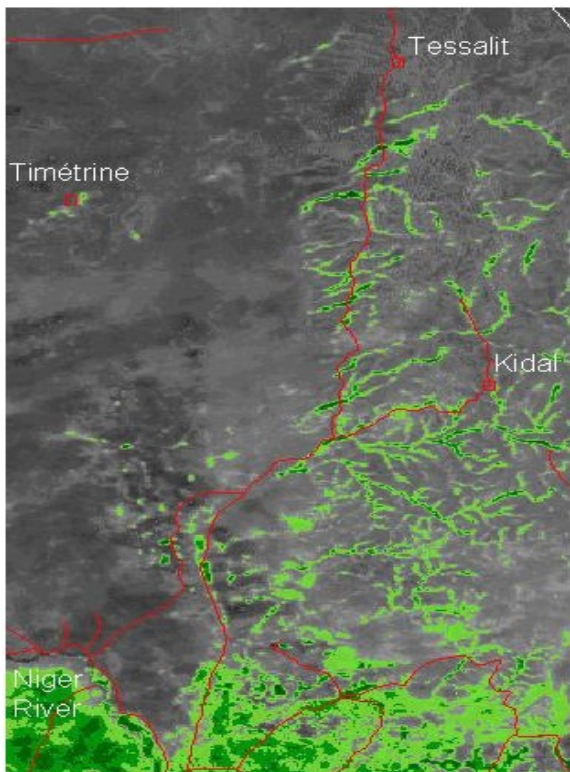
Summer rains have nearly come to an end and vegetation is starting to dry in many parts of the Sahel in West Africa and Sudan. Conditions are slowly improving on the Red Sea coastal plains where moderate rains have fallen. Conditions are mostly dry along the Indo-Pakistan border.

In **West Africa**, the ITCZ retreated southwards during October, fluctuating between 12-17N during the first fortnight and reaching about 10N at the end of the month. Good rains were limited to parts of the western Sahel during the first dekad. In northern Mauritania, Bir Moghrein received 21 mm on 10 October. Satellite imagery and reports indicate that vegetation has slowly started to dry out in central-southern Mauritania but conditions remain favourable for hopper development. Good rains fell over the Adrar des Iforas of northern Mali (46 mm in Kidal on 3 and 4 October) and satellite imagery indicates that vegetation re-

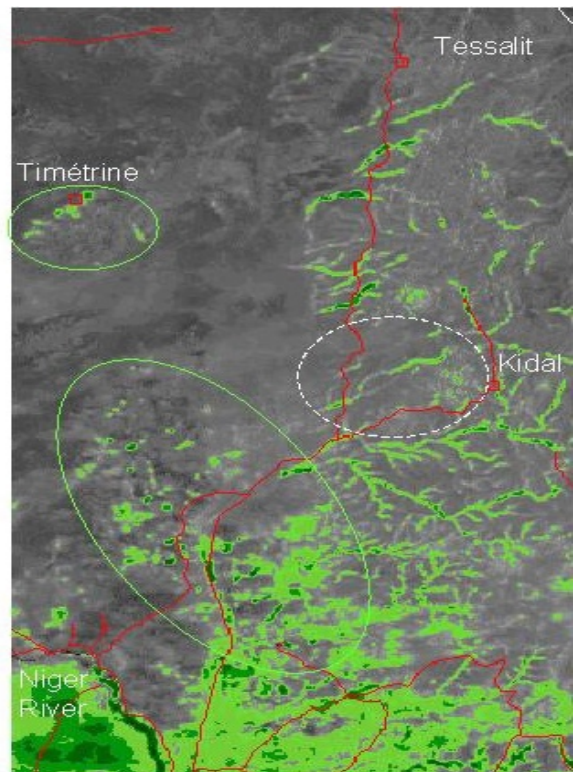
mains green and conditions are favourable for breeding in the wadis from Gao to Tessalit, in the Timétrine area and in Tamesna along 18N. In Niger, conditions are favourable for breeding in central Tamesna and in the main wadis along the western side of the Air as far north as Arlit although vegetation has slowly started to dry out. In Chad, conditions have become dry in the northeast.

In **North-West Africa**, isolated showers fell in parts of the Algerian Sahara at El Golea in the north (65 mm on 4th) and Tindouf in the south-west (29 mm on 10th). Breeding conditions were improving in these areas. Elsewhere, unfavourable conditions persist. In Morocco, good rains fell during the month on the southern side of the Atlas Mountains where the annual vegetation is developing.

In **Eastern Africa**, the ITCZ fluctuated between 15-17N during the first fortnight reaching 20N over the Red Sea on 8 October, and was consistently located near 17N during the second half of the month. Good rains fell over in a few places of the summer breeding areas in Sudan during the first fortnight and over the Red Sea coastal plains during the third dekad. Vegetation in the interior has started to dry out. On the Red Sea coastal plains of Sudan and Eritrea, conditions are expected to improve. In Somalia, conditions remain good in the interior where rains fell during the month and conditions are improving along the coast.



SPOT VGT Sept.99 dek3



SPOT VGT Oct.99 dek2

Satellite imagery indicates the recent change in the vegetation cover (decrease - - - / increase —) in the Adrar des Iforas and adjacent areas of Tilemsi Valley and Timétrine, Mali. [source: SPOT VEG, 21-30 Sep., 11-20 Oct]

In the **Near East**, moderate rains fell on several days during the month on the southern Red Sea coastal plains near Jizan, Saudi Arabia. Vegetation is green in most of the major wadis on the Red Sea coastal plains from Qunfidah, Saudi Arabia, to Zabid, Yemen. Dry conditions prevailed on the coastal plains of the Gulf of Aden but are improving in the adjacent interior due to recent rainfall. Conditions are improving in parts of the interior of northern Oman after rains during September.

In **South-West Asia**, unusually good rains fell in the Tharparkar Desert of Pakistan at the beginning of October. Mostly dry conditions prevailed in Khairpur Desert and in the desert areas of Rajasthan, India. Except for some localized areas of green vegetation in Jaisalmer, Bikaner and Barmer districts, breeding conditions were still reported to be unfavourable.



Area Treated

Mauritania 65 ha (21-31 Oct.)



Desert Locust Situation and Forecast

(See also the summary on the first page)

WEST AFRICA

Mauritania

• SITUATION

Reports indicate that the breeding began in September and continued during early October in central-south Mauritania. As a result, hoppers and fledglings appeared while there was a continual decrease of maturing and mature populations. Patches of solitarious hopper were reported throughout October in Brakna where three groups of fledglings were observed in the north-east (1832N/1240W) during the third dekad. Solitarious and transiens hoppers at densities up to 20,000/ha were reported from Tagant during the second and third dekads, mainly in the south-west between Moudjeria and Tidjikia. Similar situations were reported from Aouker Aioun but to a lesser extent. No Desert Locusts were seen east of Nouakchott.

• FORECAST

As a result of previous breeding, new adults will continue to appear during the forecast period. As vegetation dries out, they will concentrate and form groups and could move towards the north on a small scale. There is a very low possibility of a few adults appearing in the north from Mali at the end of the forecast period.

Mali

• SITUATION

While unconfirmed, the reports received during October indicate that breeding occurred in September in the north. On 6 October, copulating adults and swarms of mature adults were seen in north Timetrine where the soil was humid (rain on 3rd October). On the 8th, locusts were seen near Aguelhok (1929N/0052E), on the 11 and 12th, hoppers were reported from Oued Infarach, near Timetrine (1927N/0026W), and adults from Asler (1852N/0018E) in the Tilemsi Valley. From 18-20 October, locusts were observed in various wadis of the Adrar des Iforas and again in the Tadhak area (2032N/0005W), in north Timetrine; copulating adults were seen near Asler.

• FORECAST

Locust numbers will continue to increase as a result of the current breeding in the Timetrine, Adrar des Iforas and the Tilemsi Valley, which could extend to parts of Tamesna. Several small bands and swarms are likely to form especially as vegetation starts to dry out. Small scale movement of adults towards the north-west could occur by the end of the forecast period.

Niger

• SITUATION

A survey, limited by abundant rains and subsequent flows and temporary pools, was carried out from 22 August to 13 September. The results indicate that scattered maturing adults were present in Air at Assode (1826N/0828E) and Tadek (1914N/0826E) and in Tamesna at In Abangharit (1801N/0602E), Tadrek Valley (1805N/0635E) and west of Imouraren (1812N/0718E).

• FORECAST

As a result of small scale breeding, locust numbers probably increased in Tamesna and western Air during late September and October. During the forecast period, low numbers of adults will persist in some areas of Tamesna and Air.

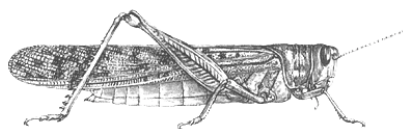
Chad

• SITUATION

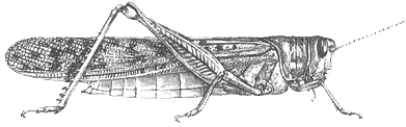
No reports received.

• FORECAST

Low numbers of adults may be present in the north-east near Fada and in the Ennedi. If so, these should decline as conditions start to dry out.



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Senegal

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.

Burkina Faso, Cape Verde, Gambia, Guinea Bissau, and Guinea Conakry

• FORECAST

No significant developments are likely.

NORTH-WEST AFRICA

Algeria

• SITUATION

During October, there were unconfirmed reports of scattered adults in the south-west near Tindouf (2742N/0809W) and in the south near Tamanrasset (2247N/0531E).

• FORECAST

No significant developments are likely. There is a very low possibility of a few adults appearing in the south or south-west from Mali at the end of the forecast period.

Morocco

• SITUATION

At the end of October, scattered immature adults were reported in the extreme south and in the south-east, south of the Anti-Atlas Mountains.

• FORECAST

Low numbers of locusts will persist in a few places south of the Atlas Mountains.

Libyan Arab Jamahiriya

• SITUATION

No reports were received.

• FORECAST

No significant developments are likely.

Tunisia

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.

EASTERN AFRICA

Sudan

• SITUATION

Isolated solitary adults at densities of 3-5 adults/km were present along the eastern bank of the Atbara River (1710N/3430E) on 11-12 October. Elsewhere, no locusts were seen west of Omdurman, along the western bank of the Atbara River, in White Nile and in Northern Kordofan during other surveys carried out on 28-29 September, 3-4 October and 14-20 October, respectively.

• FORECAST

Breeding will decline in the interior as conditions dry out. Adults are expected to move on a small scale towards the Red Sea coastal plains and breed with the onset of the rains.

Eritrea

• SITUATION

As a result of recent rainfall along the eastern escarpments, vegetation is greening. However, no locusts were reported during October.

• FORECAST

If good rains occur during the forecast period, small scale breeding could start in parts of the Red Sea coastal plains.

Somalia

• SITUATION

During survey carried out on 5-10 October in the interior, some mature adults were only found north of Erigavo at 1040N/4720E. No locusts were seen from Hargeisa to the coast west of Berbera on the 30-31st.

• FORECAST

Low numbers of adults will probably persist and breed on the plateau near Hargeisa and Erigavo in areas of recent rainfall. Some adults may appear on the coast near Berbera where vegetation is greening up.

Ethiopia

• SITUATION

No reports received.

• FORECAST

A few adults may be present near Dire Dawa where rains have fallen during the first fortnight of October.

Djibouti

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.

Kenya, Tanzania and Uganda

• FORECAST

No significant developments are likely.

NEAR EAST

Saudi Arabia

• SITUATION

No locusts were seen during aerial surveys carried out along the Red Sea coastal plains from Jeddah to the Yemeni border from 16-19 October.

• FORECAST

Isolated adults may be present near Jizan where rains were reported during the first fortnight of October and could appear elsewhere along the plains south of Qunfidah. Small scale breeding could occur in these areas during the forecast period.

Yemen

• SITUATION

No locusts were seen during surveys carried out along the coastal plains of the Red Sea and the Gulf of Aden on 19-28 October.

• FORECAST

Locust numbers are likely to gradually increase on the Red Sea coastal plains and small scale breeding may occur in areas of recent rainfall.

Egypt

• SITUATION

Solitarious adults were present in cultivated areas in the western Desert at Sh. Oweinat (2240N/2845E).

• FORECAST

No significant developments are likely on the Red Sea coastal plains or in the interior.

Kuwait

• SITUATION

No locusts were reported during October.

• FORECAST

No significant developments are likely.

Oman

• SITUATION

No locusts were reported during October.

• FORECAST

No significant developments are likely.

United Arab Emirates

• SITUATION

No reports received.

• FORECAST

No significant developments are likely.

Bahrain, Iraq, Israel, Jordan, Qatar, Syria Arab Republic and Turkey

• FORECAST

No significant developments are likely.

SOUTH-WEST ASIA

Iran

• SITUATION

No locusts were seen during surveys carried out in Kerman Province at five locations near Jiroft (2841N/5748E) on 19 October.

• FORECAST

No significant developments are likely.

Pakistan

• SITUATION

During the second fortnight of September, isolated maturing and mature adults at densities of up to 8 locusts per ha were reported at 19 places in the Tharparkar, Khairpur and Cholistan deserts. Lower numbers were present at 4 places in Uthal district west of Karachi.

During the first fortnight of October, the number of locations reporting locusts decreased to 16 in the desert areas near the Indian border and 3 in Uthal district. Densities decreased as well to a maximum of 7 adults per ha.

• FORECAST

Locust numbers will decline further in summer breeding areas and no significant developments are likely.

India

• SITUATION

Scattered adults at densities of up to 6 locusts per ha were reported from 3 localities of Barmer and Jaisalmer districts of Rajasthan; the maximum density was reported at Baldaderi ki Basti (2636N/7014E) in Jaisalmer district on 8 October. No locusts were reported during surveys carried out on 16 -31 October.

• FORECAST

A few locusts may persist in Rajasthan, however no significant developments are likely.

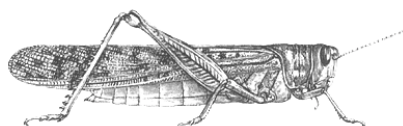
Afghanistan

• SITUATION

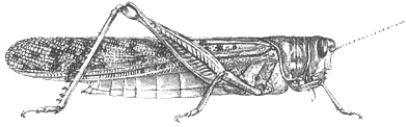
No reports received.

• FORECAST

No significant developments are likely.



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DESERT LOCUST BULLETIN

The following special terms are used in the Desert Locust Bulletin when reporting locusts:

**Announcements**

Locust reporting. Affected countries are kindly reminded to make sure that locust situation reports are sent to FAO HQ by the 25th day of the month so the information can be included in the FAO bulletin for the current month; otherwise, it will not appear until the following month. Reports should be sent even if no locusts were found or if no surveys were conducted.

EMPRES (Central Region) Liaison Officers Meeting. The 7th meeting will be held in Sana'a, Yemen on 6-10 November. A participatory workshop format will be followed to examine EMPRES progress and formulate a workplan for 2000.

Western Region. A Ministerial meeting will be held on 15 November in Rome as a follow-up to two previous technical meetings on the restructuring of the bodies responsible for Desert Locust management in West and North-West Africa.

EMPRES (Central Region) Consultative Committee. The second meeting will be held in Rome on 24-26 November.

FAO Commission for Controlling the Desert Locust in the Eastern Region. The 22nd session has been postponed to 16-20 January 2000 in Tehran, I.R. Iran.

LOCUSTOX publications. New publications have been added to the LOCUSTOX Webpage (<http://www.fao.org/news/global/locusts/locustox/loxtxhome.htm>).

NON-GREGARIOUS ADULTS AND HOPPERS**ISOLATED (FEW)**

- very few present and no mutual reaction occurring;
- 0 - 1 adult/400 m foot transect (or less than 25/ha).

SCATTERED (SOME, LOW NUMBERS)

- enough present for mutual reaction to be possible but no ground or basking groups seen;
- 1 - 20 adults/400 m foot transect (or 25 - 500/ha).

GROUP

- forming ground or basking groups;
- 20+ adults/400 m foot transect (or 500+/ha).

ADULT SWARM AND HOPPER BAND SIZES**VERY SMALL**

- swarm: less than 1 km² • band: 1 - 25 m²

SMALL

- swarm: 1 - 10 km² • band: 25 - 2,500 m²

MEDIUM

- swarm: 10 - 100 km² • band: 2,500 m² - 10 ha

LARGE

- swarm: 100 - 500 km² • band: 10 - 50 ha

VERY LARGE

- swarm: 500+ km² • band: 50+ ha

RAINFALL**LIGHT**

- 1 - 20 mm of rainfall.

MODERATE

- 21 - 50 mm of rainfall.

HEAVY

- more than 50 mm of rainfall.

OTHER REPORTING TERMS**BREEDING**

- the process of reproduction from copulation to fledging.

SUMMER RAINS AND BREEDING

- July - September/October

WINTER RAINS AND BREEDING

- October - January/February

SPRING RAINS AND BREEDING

- February - June/July

DECLINE

- a period characterised by breeding failure and/or successful control leading to the dissociation of swarming populations and the onset of recessions; can be regional or major.

OUTBREAK

- a marked increase in locust numbers due to concentration, multiplication and gregarisation which, unless checked, can lead to the formation of hopper bands and swarms.

UPSURGE

- a period following a recession marked initially by a very large increase in locust numbers and contemporaneous outbreaks followed by the production of two or more successive seasons of transient-to-gregarious breeding in complimentary seasonal breeding areas in the same or neighbouring Desert Locust regions.

PLAGUE

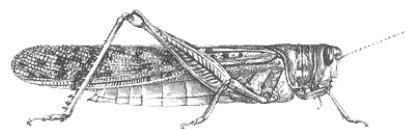
- a period of one or more years of widespread and heavy infestations, the majority of which occur as bands or swarms. A major plague exists when two or more regions are affected simultaneously.

RECESSION

- period without widespread and heavy infestations by swarms.

REMISSION

- period of deep recession marked by the complete absence of gregarious populations.



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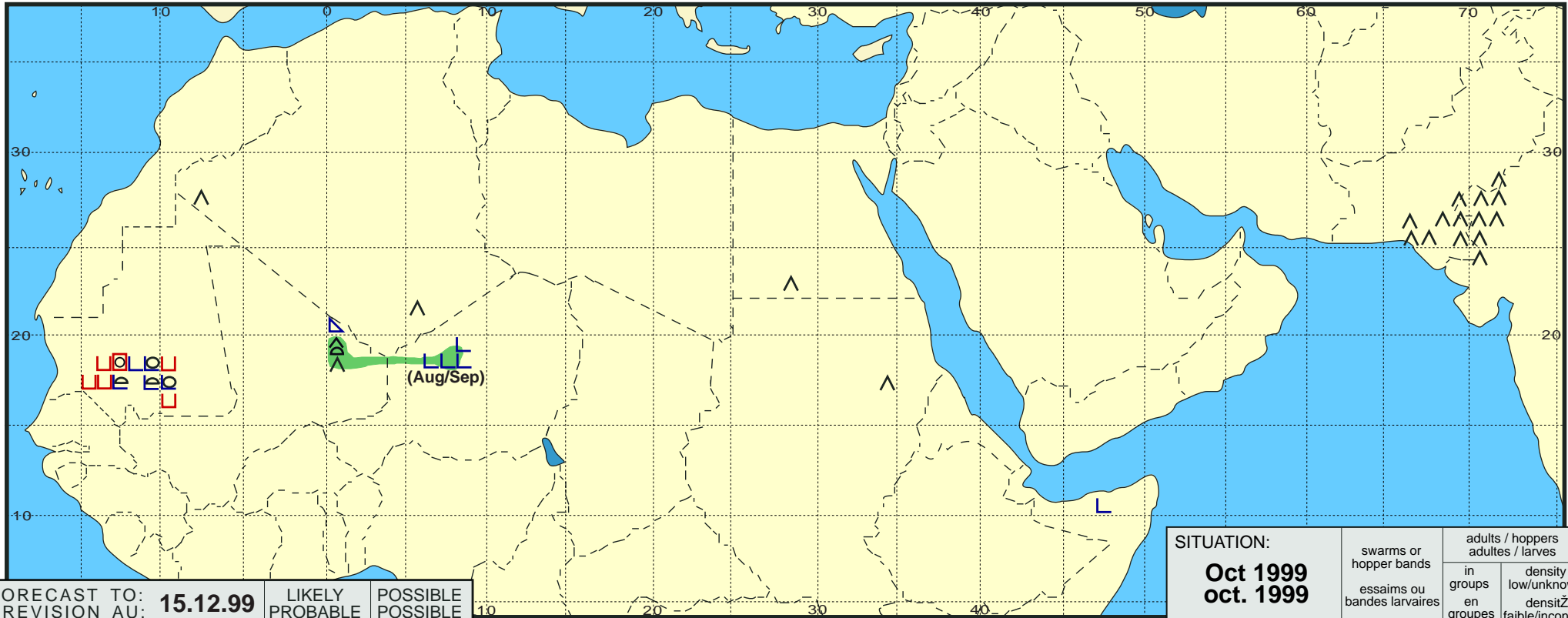
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Desert Locust Summary

Criquet pèlerin - Situation résumée

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FORECAST TO: PREVISION AU:	15.12.99	LIKELY PROBABLE	POSSIBLE POSSIBLE
favourable breeding conditions conditions favorables à la reproduction			
major swarm(s) essaim(s) important(s)			
minor swarm(s) essaim(s) limité(s)			
non swarming adults adultes non essaimant			

SITUATION: Oct 1999 oct. 1999	swarms or hopper bands	adults / hoppers adultes / larves	
	essaims ou bandes larvaires	in groups en groupes	density low/unknown densité faible/inconnue

immature adults adultes immatures			
mature or partly mature adults adultes matures ou partiellement matures			
adults, maturity unknown adultes, maturité inconnue			
egg laying or eggs pontes ou Œufs			
hoppers larves			
hoppers & adults (combined symbol example) larves et adultes (exemple symboles combinés)			